

A Yang Data Model for WSON Optical Networks

draft-lee-ccamp-wson-yang-02

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Major Changes (from v1)

- Augmented from Generic TE-Topology draft:
 - <https://datatracker.ietf.org/doc/draft-ietf-teas-yang-te-topo/>
- Sorted it out the overlap with Flexi-grid authors (<https://datatracker.ietf.org/doc/draft-vergara-ccamp-flexigrid-yang/>) to be consistent across Generic TE-topo, WSON-TE-yang and Flexi-grid YANG drafts
 - Merging or augmenting needs to be discussed
- Discussed with Gabriele on augmenting/adding low-level model (e.g., transponder/tunable lasers, etc.)

Main Scope of this draft

- Connectivity Matrix Model
- Resource Pool Model
- Port Wavelength Restriction (to be supplied)
- Wavelength Availability on Links (to be supplied)

WSON-Topology Module

```
module: ietf-wson-topology
augment /tet:te-topologies/tet:topology/tet:topology-types/tet:tetology:
  +--rw wson-topology
augment /tet:te-topologies/tet:topology/tet:node/tet:te-nodeattributes/
tet:connectivity-matrix:
  +--rw wson-matrix
    +--rw device-type? devicetype
    +--rw dir? directionality
    +--rw matrix-interface* [in-port-id]
      +--rw in-port-id wson-interface-ref
      +--rw out-port-id? wson-interface-ref
augment /tet:te-topologies/tet:topology/tet:node/tet:te-nodeattributes/
tet:te-link:
  +--rw wavelength-available-bitmap* boolean
augment /tet:te-topologies/tet:topology/tet:node:
  +--rw resource-pool* [resource-pool-id]
    +--rw resource-pool-id uint32
    +--rw pool-state? boolean
    +--rw matrix-interface* [in-port-id]
      +--rw in-port-id wson-interface-ref
      +--rw out-port-id? wson-interface-ref
```

Next Steps

- To be adopted by CCAMP WG as a starting point of the work.
- Continued to work on the model for maturity.
 - More to be done on resource block models, etc.